

#### **Desertification in Turkey**

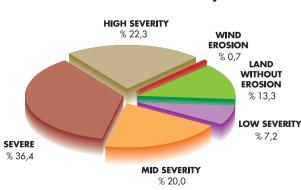
North and south of Turkey is surrounded with mountains and altitude ascends from west to east. Turkey's average altitude is 1,132 m whereas Europe's average altitude is 330 m. 46% of the total land has slope more than 40%, 62.5% of the total land has slope more than 15%. These figures show how mountainous and hilly Turkey is. Therefore 3/4 of our lands are exposed to severe and more severe erosion.

59% of agricultural lands, 64% of rangelands and 54% of forestlands are exposed to erosion. There are not any deserts in Turkey however desertification risk is present for significant part of the country, especially Konya and Iğdır provinces and Southeast Anatolia Region.

The main reason for desertification in Turkey is erosion. Beside erosion, degradation of natural resources, over- and excessive grazing in rangelands, dispersed settlement, misuse of lands, improper agricultural techniques, insufficient water bodies, wrong irrigation techniques, excessive use of manure and pesticides, rural poverty, lack of training on use of natural resources are among the reasons of desertification.

Our country, especially Central Anatolia region is shown as 'very highly sensitive and highly sensitive' on World Desertification Risk Map. Nearly 500 million ton soil is carried to the seas and lakes. Forestlands requiring erosion precautions include 3 million hectares.

#### **Erosion in Turkey**



# United Nations Convention to Combat Desertification

### Objective of the Convention;

To contribute to the provision of sustainable development in the affected countries, to combat against desertification in the countries that are exposed to severe drought and/or desertification through effective actions, at any level supported by international cooperation partnership regulations and to alleviate the effects of drought.

#### **Process of the Convention**

In 1192, United Nations General Assembly determined three main conventions at United Nations Convention to Environment and Development.

They are;

- Climate Change,
- Biological Diversity,
- Combating Desertification and Drought.

On June 17th, 1994 Convention to Combat Desertification was accepted in Paris. The convention was opened for signature and came into force on December 26th, 1994. Thereby, 17th June was announced as the World Day to Combat Desertification.

Our country became a party to United Nations Convention to Combat Desertification through Law no. 4340, which was signed in Paris on 15 October 1994 and was also published in the Official Gazette no. 23258 dated 11 February 1998.

As of the date above, Turkey involved actively in fourth Annex of the Convention, namely

"Regional Implementation Annex for the Northern Mediterranean" (Portugal, Spain, Italy, Albania, Macedonia, Bosnia-Herzegovina, Croatia, Serbia Montenegro, Greece and Turkey). As per date, 193 countries have become a party to this convention.

## Decision Making and Governing Bodies of the Convention

- 1- COP (Conference of the Parties)
- 2- CRIC (Committee for the Review of the Implementation of the Convention)
- 3- CST (Committee on Science and Technology)

# UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION THE SEVENTH SESSION OF THE COMMITTEE FOR THE REVIEW OF THE IMPLEMENTATION OF THE CONVENTION (CRIC 7) AND THE FIRST SPECIAL SESSION OF THE COMMITTEE ON SCIENCE AND TECHNOLOGY (CST-S1)

United Nations Convention to Combat Desertification "The Seventh Session of the Committee for the Review of the Implementation of the Convention (CRIC 7)" and "the First Special Session of the Committee on Science and Technology (CST)" was under-taken by the coordination of repealed Directorate General of Afforestation and Erosion Control under repealed Ministry of Environment and Forestry and the sessions were held in Istanbul in 3-14 November 2008 and hosted by Turkey. The two organs of the Convention gathered simultaneously for the first time. From 182 countries some 1100 country delegates, scientists and representatives of non-govern-mental organizations attended in the meetings. The Undersecretary of repealed Ministry of Environment and Forestry of Turkey Prof. Dr. Hasan Zuhuri SARIKAYA was the chairman of the meeting's opening session. The meeting was started with the opening statements of repealed Minister of Environment and Forestry of Turkey Prof. Dr. Veysel EROĞLU and UNCCD Executive Secretary Mr. Luc GNACADJA.

#### **Activities:**

Turkey was selected for the Convention presidency of North Mediterranean region for a year period. During the meetings, in order to share the experiences possessed by Turkey with the other countries; four side meetings and technical trips were organized, a country stand was opened where Turkey's works were exhibited and a memorial forest was established for the memory of the meeting.

#### **Decisions**

In Istanbul meetings, which were touchstones for the Convention, decisions were taken for the sake of the Convention's future at very significant matters such as implementation of ten year strategic plan, working principles of the committees, determination of desertification indicators and discussions were held at the below-mentioned issues:

- Identification of the life standards of the community that is affected by desertification and developing improvement methods,
- Displaying the socioeconomic parameters of the catchments, sub-catchments and regions that are affected by desertification and establishing a database,
- Establishing monitoring network systems by reviewing the country ecosystems,
- Identification of global profitability rates that combating against desertification would create,
- Effectuating plans and implementations required for increasing carbon stocks,
- Mapping the areas and/or ecosystems that are affected by desertification at various levels and displaying methods at this study.
- Determination of formation dynamics of the indicators belonging to the problems at catchment level,
- Selection of standard methods to be used at all works that will be realized in desertification field,
- Determination of place of biodiversity at habitat areas within desertification and their reciprocal relations,
- The relation of problems that cause climate change with desertification or land degradation and considering different land use types as sink areas.





# REPUBLIC OF TURKEY MINISTRY OF FORESTRY AND WATER AFFAIRS GENERAL DIRECTORATE OF COMBATTING DESERTIFICATION AND EROSION





# Combating Desertification





### **Combating Desertification**

#### Desertification:

Is defined as decomposition in arid, semi arid and semi humid lands due to climate changes and human activities.

Drought usually launches desertification or worsens the process. However four other actions of humans are more effective on desertification. The soil is exhausted by misuse of lands and improper agricultural practices. Excessive grazing damages the vegetation cover protecting the soil from erosion. Each year 500,000 hectares land is facing desertification as a result of destruction of forest lands, salted farmlands due to implementing improper irrigation methods, etc. This figure equals to each new land opened for irrigation.

#### Desertification in the World

Considering the fact that 1.2 billion people, 25% of lands, 75% of arid lands and 110 countries, 90% of which are developing, are under threat of desertification; serious precautions should be taken against this issue.

Desertification is dominantly felt in regions where the soil layer is extremely sensitive, vegetation layer is extremely thin and the climate is extremely harsh. (The soil can be degraded anywhere, yet degradation in arid climate is called desertification). 70% of arid farmlands of 5,200,000 hectares farmland have lost their farming characteristics all over the world. Therefore, desertification harms 30% of total lands.

United Nations Environment Programme (UNEP) calculated the general cost of desertification as 42 billion dollars. Annual loss of Africa, for instance, is 9 billion dollars.







SALINITY



MISUSE OF LANDS

### Implementations in Turkey





#### For combating desertification,

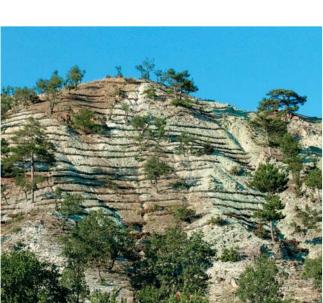
- National Action Programme for Combatting Desertificatin was prepared in 2005.
- National Action Programme for Combatting Erosion (2013-2017) is underway
- Soil Conservation and Land Use Law come into force.
- National Forestry Strategy was adopted and put into practice.
- Action Plan for Combating Agricultural Drought (2008-2012) was prepared and put into practice.
   Action Plan for Combating Agricultural Drought covering the period of 2013-2017 is underway.
- Management plans for wetlands were prepared; soil assigning with bylaws such as national park, natural preservation area, natural monument, nature park.
- Desertification Monitoring Project is carried out with Portugal and Italy by the coordination of the European Space Agency.
- Species that are tolerant to fire are used in the forests that are established in fire-sensitive areas.
- In forest planning studies, the approach towards wood production is left and functional planning conservation and land use law was put into practice
- National Biologic Diversity Strategy and Action Plan of Turkey was prepared and put into practice.



SEEDLING PRODUCTION - KIZILCAHAMAM



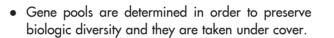
MANYAS BIRD PARADISE NATIONAL PARK



COMBATING EROSION - KASTAMONU



FEN BELT AFFORESTATION - KAHRAMANMARA

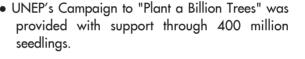


- In 2006, Climate Change 1st National Notice was prepared.
- Turkey National Climate Change Action Plan (2011-2023) was prepared and come into practice
- Researches are realised for determination of the species that are compatible with climate change and tolerant to drought. Seeds and seedlings of the determined species are produced as per the outcomes of these researches.
- Turkey national biodiversity strategy and action plan was updated in 2007
- National Strategy for Rural Development (2010-2013) was accepted and "Agricultural and Rural Development Enhancement Institution" was established to develop and generalise rural development policies.
- The areas that are rich in terms of natural resources, being scarce or under threat, are taken under cover for sustainable management of natural resources by method is adopted and implemented for forests.
- Conservation forests are established for protection of catchments. In these areas any practice that may degrade the soil is not allowed.



EMPLOYMENT IN RURAL AREAS - KONYA

- Appropriate methods are used in catchments' afforestation studies to increase water quality and quantity
- In line with convention to combat desertification 10 years strategic plan, projects of sustainable integrated-participatory rehabilitation are focused on.



RANGELAND REHABILITATION IN FOREST - ARDAHAN

 Various films, posters, brochures and printed documents, panels, classes for students at schools, sport tournaments, photograph exhibitions, special stamps and activities, etc. have been prepared in order to raise public awareness and provide information.





• Afforestation, erosion control, rangeland rehabilitation and degraded forest rehabilitation works were accelerated with the aim of combating desertification. With this purpose; National Afforestation and Erosion Control Campaign National Plan was prepared and put into practice. Within the scope of action plan, afforestation, erosion control, rangeland rehabilitation and degraded forest land rehabilitation works will be realised in 2,300,000 hectares area and 2,300,000 seedlings will planted. Diversity in seeds and seedlings were increased to use in these works. Each year, 400 million seedlings are produced at average from 400 different species.



Healthy soil sustains your life LET'S GO LAND-DEGRADATION NEUTRAL





17 June 2012 World Day to Combat Desertifica





COMMUNITY PARTICIPATION IN AFFORESTATION